REMARKS

The amendment to the specification is supported by original Claims 1-14. New Claim 62 characterizes the high performance elastomer as a styrene block copolymer elastomer, and the low performance elastomer as a metallocene catalyzed polyolefin elastomer. New Claim 63 characterizes the high performance elastomer as a styrene block copolymer elastomer, and the low performance elastomer as an ethylene copolymer elastomer having a density less than 0.90 grams/cm^3. These limitations are supported on pages 15, 16 and 17 of the specification. Both claims require the breathable film to have a water vapor transmission rate of at least about 1000 grams/m^2/24 hours, as described on page 16. New Claims 64-73 depend from Claim 62 or Claim 63, and are supported throughout the specification.

Applicants' invention is directed to a breathable, stretch-thinned elastic film including the claimed high performance elastomer, low performance elastomer and filler particles. When the film is stretched and relaxed, the low performance elastomer remains somewhat stretched, causing voids (e.g. micropores) to form around the filler particles in the low performance elastomer. This causes the film to have breathability to water vapor. The high performance elastomer tends to stretch and substantially recover, and does not contribute significantly to void formation around the filler particles. Rather, the high performance elastomer causes the film to

have elastic recovery properties. The combination of high performance elastomer, low performance elastomer and filler makes it possible to have a film that is breathable due to stretch-thinning and void formation, which also has elastic properties.

The high performance elastomer is a styrene block copolymer which, as explained on page 15 of the specification, has a hysteresis of less than about 75% when a film sample formed from the elastomer is elongated by 50%, then allowed to retract and stretched again. All styrene polymers will not function as high performance elastomers. Rather, the styrene polymer must be a block copolymer that is capable of a) being formed into a film, b) stretched by at least 50% without breaking and c) exhibiting a hysteresis of less than about 75% upon recovery and further stretching. The hysteresis measurement is further described on pages 45-46.

The low performance elastomer is a metallocene-catalyzed polyolefin (Claim 62) and/or an ethylene copolymer elastomer having a density less than 0.90 grams/cm^3 (Claim 63). While the low performance elastomer is described differently in Claims 62 and 63, the descriptions substantially overlap. For instance, linear low density polyethylene is a copolymer of ethylene and an alpha-olefin, which typically has a density higher than 0.90 grams/cm^3 and is typically not elastomeric. In order for

linear low density polyethylene to exhibit elastomeric properties, its alpha-olefin content must be raised to a level that causes its density to fall below 0.90 grams/cm^3.

Conventional linear low density polyethylene, made using Ziegler-Natta catalysts, was not typically made at lower densities (less than 0.90 grams/cm^3) because the resulting polymer lacked sufficient structural integrity to form a useful film. The advent of metallocene catalyst technology allowed linear low density polyethylene to be produced with a narrower molecular weight distribution and other useful properties contributing to increased strength. This in turn allowed brands of useful linear low density polyethylene having densities less than 0.90 grams/cm^3 with suitable strength, to be produced using higher alpha-olefin monomer contents.

For this reason, Claims 62 and 63 overlap and should be considered together, even though it is possible to infringe one of the claims without infringing the other. For purposes of this invention, the terms "metallocene", "constrained geometry" and "single-site" catalysts refer to equivalent technologies. Accordingly, while Claim 62 refers to a metallocene catalyzed polyolefin elastomer, Claim 63 limits the density of the ethylene copolymer elastomer but does not specify a catalyst.

The Examiner rejected Claims 1-10, 12 and 13 under 35 U.S.C. §102(b) as anticipated by U.S. Patent 5,695,868 to McCormack. The Examiner rejected Claims 1-10 and 33-39 under 35 U.S.C. §102(b) as anticipated by WO 99/47590 to

Hetzler et al. The Examiner further rejected Claims 1-4, 6-14 and 33-40 under 35 U.S.C. §103(a) as obvious over U.S. Patent 6,015,764 to McCormack. All of these rejections should be rendered moot by the cancellation of Claims 1-14 and 33-40. Furthermore, these references do not disclose or suggest the limitations of new independent Claims 62 or 63.

U.S. Patent 5,695,868 discloses a blend which includes linear low density polyethylene (LLDPE), a bonding agent and a particulate filler. The reference does not disclose that the LLDPE is a low performance elastomer which is a) metallocene catalyzed as required by Claim 62 or b) has a density less than 0.90 grams/cm^3 as required by Claim 63. The reference discloses that the bonding agent may be a tackifying resin as described in U.S. Patent 4,789,699 to Kieffer et al., which is incorporated by reference. The incorporated patent discloses tackifying resins (Col. 10, line 44 - Col. 12, line 60), but distinguishes them from styrene block copolymer elastomers (described at Col. 8, line 34 - Col. 9, line 37).

The incorporated patent to Kieffer et al. does not disclose that styrene block copolymer elastomers (described at Col. 8, line 34 - Col. 9, line 37) are useful as tackifying resins (described at Col. 10, line 44 - Col. 12, line 60). U.S. Patent 5,695,868 only incorporates the tackifying resins of Kieffer et al. as useful bonding agents, and not the styrene block copolymer elastomers described elsewhere in Kieffer

et al. While the tackifying resins may contain styrene or styrene derivatives, these materials typically have very low molecular weights, lack independent structural integrity, and are intended for bonding other materials together. The disclosed tackifying resins do not constitute high performance elastomers as recited in Claims 62 and 63.

International Publication WO99/47590 discloses a microporous LLDPE film segment having calcium carbonate filler particles (p. 13, lines 3-12). The film segment may also include a bonding or tackifying resin (p. 16, lines 23-25) as described in U.S. Patent 5,695,868. As explained above, U.S. Patent 5,695,688 does not disclose a high performance styrene block copolymer elastomer combined with a low performance elastomer and filler, as recited in Claims 62 and 63. Therefore, no such disclosure can be inferred from International Publication WO 99/47590.

U.S. Patent 6,015,764 does not disclose a stretch-thinned breathable film which includes both a high performance styrene block copolymer elastomer and a low performance elastomer, in addition to a filler, as required by Claims 62 and 63. While the reference discloses a breathable elastomeric film, it does not disclose a film including both of the elastomers combined together. Furthermore, the reference provides only one definition of elasticity, applicable to the entire film (Col. 4, lines 9-26). The reference does not distinguish between high and low performance

elastomers, does not disclose that they have different properties, and does not recognize a benefit from using them together.

Applicants believe that the Claims 62-73, presented above, are in condition for allowance. If the Examiner feels that any issues remain unresolved, then Applicants' attorney respectfully requests a telephone interview with the Examiner.

Respectfully submitted,

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